REMARKS

Reconsideration is respectfully requested. Claims 60-69 are pending. Claims 1-59 have been canceled.

With respect to all amendments and cancelled claims, Applicants have not dedicated or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections and/or objections made by the Patent Office. Applicants reserve the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional applications.

Claim Rejection Under 35 U.S.C. § 103

Claims 60-69 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kayyem et al. (WO 98/20162) ("Kayyem"), in view of Shuber (US 5,633,134) ("Shuber"). Applicants respectfully traverse

To establish a *prima facie* case the prior art reference(s) must teach or suggest each and every limitation of the rejected claims. *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991); M.P.E.P. §2142.

Claims 61-69 depend from claim 60, which requires a first probe and second probe that are "substantially complementary to said first domain," but that have different nucleotides at the "interrogation position." Thus, claim 60 not only requires that two probes compete for hybridization to the same domain, but also requires that the two probes have different nucleotides at the interrogation position that could be "perfectly complementary" to the same "detection position" in the first domain of the target sequence.

In contrast, neither *Kayyem* nor *Shuber* discloses two or more probes that are complementary to the same domain of the target, and neither discloses probes having different nucleotides at the "interrogation position" as claim 60 requires.

The Examiner states that:

Shuber is relied on for teaching multiple oligonucleotide probes specific for one domain. Shuber teach [sic] multiple oligonucleotide probes with labels for determining nucleotides at the detection position at col. 5 lines 13-21. Here Shuber describes ASOs (labeled probes) which are used to detect mutations at multiple interrogation positions.

Therefore, the Examiner concedes that *Shuber* only discloses probes that are used to detect mutations at multiple positions, not the same "interrogation position" as claim 60 requires. This can be illustrated in the following drawing in comparison with the requirement of claim 60 (the illustration herein is by no means to be interpreted as adding limitation to claim 60):

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Schuber

first probe

second probe

www C www

~~~~ A ~~~~

target sequence

Claim 60

A www

first probe

www C www

second probe

target sequence

Therefore, Shuber discloses multiple probes that are complementary to different interrogation/detection positions within a target sequence. Thus, the multiple probes of Schuber are not, as claimed here, complementary to the <a href="mailto:same">same</a> interrogation/detection position. Instead, the multiple probes of Schuber are each complementary to <a href="mailto:different">different</a> detection positions on the target sequence.

Kayyem does not teach or suggest what Shuber lacks. Kayyem discloses a probe that hybridizes to two domains on two different sequences - one is on the anchor sequence and the other is on the target sequence, and two probes hybridize to two different domains of the target sequence. As demonstrated above, Shuber only discloses multiple probes hybridized to different detection positions of the target gene. Kayyem and Shuber thus fail to teach, alone or in combination, a first probe and a second probe "substantially complementary to said first domain," their difference being different nucleotides at the same "interrogation position" are required by claim 60.

Because Kayyem and Shuber taken together do not teach all of the elements of independent claim 60, and of claims 61-69 dependent thereon, claims 60-69 cannot be obvious over Kayyem in view of Shuber. Accordingly, Applicants respectfully request that the rejection be withdrawn.

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## CONCLUSION

Applicants respectfully submit that the claims are now in condition for allowance and early notification to that effect is respectfully requested. If the Examiner feels there are further unresolved issues, the Examiner is respectfully requested to phone the undersigned at (415) 781-1989.

By: Customer No.: 3/2940

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